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REMARKS

Claims 1-20 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,991,669 to Dominke et al. "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1984) (emphasis added). In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of anticipation based upon the prior art. In re Sun, 31 U.S.P.Q.2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Applicant respectfully asserts that the Examiner has not yet met his burden of establishing a prima facie case of anticipation with respect to the rejected claims.

The prior art of record does not disclose or suggest the features of claims 1, 8 or 15. Claims 1 and 15 comprise, among other things, a hierarchical control system including an upper hierarchical level and a lower hierarchical level, with the lower hierarchical level communicating to the upper hierarchical level by sending upward signals, wherein the upward signals include availabilities of the lower hierarchical level independent of a request for vehicle modification and the lower hierarchical level is a suspension coordinator subsystem. Claim 8 comprises a vehicle motion control subsystem which outputs downward signals out of the control output to the subsystem input of the suspension coordinator subsystem and a suspension coordinator subsystem which outputs upward signals out of the subsystem output to the control input of the vehicle motion control subsystem, wherein the downward signals include at least one request for vehicle modification and the upward signals include availabilities of the suspension coordinator subsystem independent of the request for vehicle modification.

According to the Office Action, the Dominke et al. '669 patent discloses a suspension coordinator subsystem that sends upward signals including availabilities of the suspension coordinator subsystem and that such a disclosure is described in lines 14-33 of column 4 of the Dominke et al. '669 patent. According to lines 14-33 of column 4 of the Dominke et al. '669 patent, a coordinator asks the sources of the resource as to an available potential. However, the suspension as identified in Fig. 3 of the Dominke et al. '669 patent is not a source of a resource. Therefore, the "coordinator" as disclosed in the Dominke et al. '669 patent does not

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receive an upward signal including availabilities of a "suspension." Therefore, claims 1, 8 and 15 are in condition for allowance.

Claim 2 depends from claim 1, claim 9 depends from claim 8, and claim 16 depends from claim 15, and since claims 1, 8 and 15 define unobvious patentable subject matter as discussed above, claims 2, 9 and 16 define patentable subject matter. Furthermore, the Dominke et al. '669 patent does not disclose or suggest upward signals that include availabilities of a mode of operation of a suspension coordinator subsystem. As discussed above, the Dominke et al. '669 patent does not include a suspension coordinator subsystem that communicates availabilities. Accordingly, the Dominke et al. '669 patent does not disclose an upward signal that includes availabilities of a mode of operation of a suspension coordinator subsystem. Accordingly, claims 2, 9 and 16 are in condition for allowance.

The prior art of record does not disclose or suggest the features of claims 3, 10 and 17. Specifically, the Dominke et al. '669 patent does not disclose or suggest upward signals that include a confirmation of a mode of operation. According to the Office Action, the Dominke et al. '669 patent discloses this feature in lines 14-33 of column 4. According to this portion of the Dominke et al. '669 patent, a coordinator either asks a component for its resource requirement or receives the resource requirement from the component. Furthermore, the coordinator either asks a source of a resource as to its available potential or the source of the resource sends its available potential to the coordinator. However, whether receiving a resource requirement from a component or an available potential from a source of a resource, neither of these transmittals includes a confirmation of a mode of operation. Accordingly, the Dominke et al. '669 patent does not disclose or suggest in the portion cited in the Office Action both a downward signal that includes a request for a mode of operation and an upward signal that includes a confirmation of the mode of operation. Accordingly, claims 3, 10 and 17 are in condition for allowance.

The prior art of record does not disclose or suggest the above noted features of claims 4, 11 and 18. Specifically, the Dominke et al. '669 patent does not disclose or suggest upward signals that include a confirmation of enablement. According to the Office Action, the Dominke et al. '669 patent discloses this feature in lines 14-33 of column 4. According to this

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portion of the Dominke et al. '669 patent, a coordinator either asks a component for its resource requirement or receives the resource requirement from the component. Furthermore, the coordinator either asks a source of a resource as to its available potential or the source of the resource sends its available potential to the coordinator. However, whether receiving a resource requirement from a component or an available potential from a source of a resource, neither of these transmittals includes a confirmation of enablement. Accordingly, the Dominke et al. '669 patent does not disclose or suggest in the portion cited in the Office Action both a downward signal that includes a request for enablement and an upward signal that includes a confirmation of enablement. Accordingly, claims 4, 11 and 18 are in condition for allowance.

The prior art of record does not disclose or suggest the features of claims 5 and 12. Specifically, the prior art of record does not disclose or suggest a hierarchical control system including an upper hierarchical level and a lower hierarchical level, the upper hierarchical level communicating with the lower hierarchical level by sending downward signals and the lower hierarchical level communicating with the upper hierarchical level by sending upward signals, wherein the downward signals include vehicle state measurements of the vehicle. According to the Office Action, the Dominke et al. '669 patent includes an upper hierarchical level 100, lower hierarchical levels 106, 108, 120, 122 and 124, and "signals of vehicle measurements available to both levels (110, 112, 126, 128; fig. 1)." However, the Dominke et al. '669 patent does not disclose or suggest an upper hierarchical level communicating to a lower hierarchical level by sending downward signals that include vehicle state measurements of the vehicle. The master controller 100 in the Dominke et al. '669 patent does not send any signals including vehicle state measurements of the vehicle as set forth in the Office Action because information from elements 110, 112, 126 and 128 does not come from the controller 100. Accordingly, the Dominke et al. '669 patent does not disclose or suggest an upper hierarchical level that communicates vehicle state measurements as set forth in the Office Action. Accordingly, claims 5 and 12 are in condition for allowance.

The prior art of record does not disclose or suggest the features of claims 6, 13 and 19. Specifically, the prior art of record does not disclose or suggest a hierarchical control system including an upper hierarchical level and a lower hierarchical level, the upper hierarchical

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level communicating with the lower hierarchical level by sending downward signals and the lower hierarchical level communicating with the upper hierarchical level by sending upward signals, wherein the upward signals include vehicle state measurements of actuators controlled by the lower hierarchical level. According to the Office Action, the Dominke et al. '669 patent includes an upper hierarchical level 100, lower hierarchical levels 106, 108, 120, 122 and 124, and "signals of vehicle measurements available to both levels (110, 112, 126, 128; fig. 1)." However, the Dominke et al. '669 patent does not disclose or suggest a lower hierarchical level communicating to an upper hierarchical level by sending upward signals that include vehicle state measurements of the vehicle. The master controller 100 in the Dominke et al. '669 patent does not receive any signals including vehicle state measurements of actuators controlled by the lower hierarchical level as set forth in the Office Action because information from elements 110, 112, 126 and 128 does not come from the apparatuses 106, 108, 120, 122 or 124. Accordingly, the Dominke et al. '669 patent does not disclose or suggest a lower hierarchical level that communicates vehicle state measurements as set forth in the Office Action. Accordingly, claims 6, 13 and 19 are in condition for allowance.

The prior art of record does not disclose or suggest the features of claims 7, 14 and 20. Specifically, the Dominke et al. '669 patent does not disclose or suggest upward signals that include a status of the lower hierarchical level. According to the Office Action, the Dominke et al. '669 patent discloses this feature in lines 14-33 of column 4. According to this portion of the Dominke et al. '669 patent, a coordinator either asks a component for its resource requirement or receives the resource requirement from the component. Furthermore, the coordinator either asks a source of a resource as to its available potential or the source of the resource sends its available potential to the coordinator. However, whether receiving a resource requirement from a component or an available potential from a source of a resource, neither of these transmittals includes a status of the lower hierarchical level. Accordingly, the Dominke et al. '669 patent does not disclose or suggest in the portion cited in the Office

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Action an upward signal that includes a status of the lower hierarchical level. Accordingly, claims 7, 14 and 20 are in condition for allowance.

Respectfully submitted,

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